TRANSISTORS · RESISTORS · FILTERS · CAPACITORS MAGNETIC COMPONENTS · INTEGRATED CIRCUITS .M CIRCUITS · DELAY LINES · NETWORKS INTERFERENCE CONTROL COMPONENTS-CERAMICS TRANSISTORS · RESISTORS · FILTERS · CAPACITORS COMPONENTS -INTEGRATED THIN FILM CIRCUITS · DELAY LINES · NETWORKS INTERFERENCE CONTROL COMPONENTS-CERAMICS RESISTORS · FILTERS · CAPACITORS **MAGNETIC COMPONENTS** · INTEGRATED CIRCUITS THIN FILM CIRCUITS DELAY LINES NETWORKS INTERFERENCE CONTROL COMPONENTS-CERAMICS TRANSISTORS · RESISTORS · FILTERS · CAPACITORS MAGNETIC COMPONENT FOR ATED CIRCUITS

SPRAGUE ELECTRIC COMPANY
INTERFE
TRANSIS
ANNUAL REPORT TO EMPLOYES

CIRCUITS THIN FILM CIRCUITS - DELAT LINES . **NETWORKS** INTERFERENCE CONTROL COMPONENTS-CERAMICS RESISTORS · FILTERS · CAPACITORS MAGNETIC COMPONENTS · INTEGRATED CIRCUITS THIN FILM CIRCUITS · DELAY LINES · **NETWORKS** INTROL COMPONENTS-CERA TRANSISTORS · RESISTORS · FILTERS · CAPACITORS MAGNETIC COMPONENTS · INTEGRATED CIRCUITS JITS · DELAY LINES · INTERFERENCE CONTROL COMPONENTS-CERAMICS TRANSISTORS · RESISTORS · FILTERS · CAPACITORS

NATIONAL ISSUE



LOG

MARCH 1968 VOLUME XXX NUMBER 4

Published SPRAGUE ELECTRIC COMPANY North Adams, Massachusetts

Marion H. Manion, Editor Helen H. Cardillo Associate Editor





Dear Sprague Employe,

During 1967 Sprague Electric and many other major producers of electronic components experienced substantial reductions in sales and earnings.

However, the key elements that produced the industry-wide downturn – heavy inventories and a decline in consumer purchases of electronic end equipment – have now changed, and the improvement expected for 1968 already is reflected in higher incoming orders. In addition to this improved outlook, Sprague Electric is embarking upon an acquisition program designed to enhance the Company's growth.

A review of the year points out that, in retrospect, 1966 was an abnormally good year in the components business, and that some of the high sales in 1966 in fact represented business borrowed from 1967. We are continuing our program to reduce manufacturing costs wherever possible, and have taken strong steps to mitigate the year-to-year increase in fixed costs which is the consequence of an inflationary economy. We also expect to reach a profitable level of integrated circuit operations during the year; and this improvement, together with an expected new peak in total sales, should result in a substantial recovery in earnings in 1968.

Two important administrative changes were made during the year. On May 15, 1967, the Board of Directors elected Neal W. Welch, formerly Senior Vice President – Marketing and Sales, to be Executive Vice President of the Company in charge of passive component operations. This step was taken to provide better coordination of our manufacturing, sales and engineering activities, and to permit Ernest L. Ward to devote an increasing proportion of his time to his over-all management and planning responsibilities. On August 9, Dr. John L. Sprague was given like responsibilities for semiconductor operations, including integrated circuits and transistors. Also on May 15, Carroll G. Killen, formerly Vice President – Industrial and Military Sales, was designated Vice President – Marketing and Sales to succeed Mr. Welch.

Announcement was made of the retirement, as of July 1, 1967, of Dr. Preston Robinson as a Consultant to the Company, and his resignation on November 13 from our Board of Directors. A member of the Board since 1932, Dr. Robinson was the Company's first Director of Engineering, and was its senior scientist and technical director from 1929 until 1952.

Our long term growth plans for the Company are based on implementing the following goals:

- 1. To share in the most rapidly growing sector of the components industry, namely, integrated circuits.
- 2. To obtain a larger share of the \$1.3 billion market for passive components, in which we have proven technical competence.
- 3. To participate in the growth of the electronics markets abroad.
- 4. To grow by making appropriate acquisitions, either in related technologies to complement our existing products, or in unrelated businesses for financial purposes.

We are also grateful for the continued energetic contributions being made by our 12,000 employes throughout the world.

Chairman of the Board

Robert C. Sfrague

President

Ernest L Ward

Total 1967 Income*

Amounted to \$129,197,380

and Was Used as Follows:



Paid for materials, services and supplies	_ \$51,828,198
Paid to employes	61,664,971
Paid for taxes	5,224,012
Paid for interest on borrowed money	2,024,261
Paid in dividends to stockholders	2,019,570
Provided for depreciation and amortization	5,130,465
Reinvested in the business	1,305,903
TOTAL RECEIVED FROM ALL SOURCES	\$129,197,380

^{*}Net sales and other income of \$1,760,213

12 MINUTES A DAY FOR PROFIT

All in a Working Day

When we look at Sprague Electric's sales figures for a year we are apt to be a bit overwhelmed by the millions of dollars involved – it all seems a great deal of money, and it is.

On these pages we have broken down the figures in terms of an 8 hour working day (from 8 a.m. to 4 p.m.). You will notice that 7 hours of each day is spent for our two largest items – materials and supplies, and wages to employes. The last hour pays all other expenses, including the 12 minutes for profit.



3 Hours and 13 Minutes Materials, Services and Supplies

The second largest item in the Sprague Electric budget is the money spent for manufacturing materials, various services necessary to run a business and general operating supplies such as office equipment, stationery supplies and the like.

In 1967 these items cost \$51,828,-

THE TIME IS NOW 11:13 A.M.



3 Hours and 47 Minutes Paid to Employes

The largest single item in the Company's budget is the money paid to employes in wages and vacation and holiday pay.

Last year this one item cost \$61,664,971.

THE TIME IS NOW 3 P.M.



20 Minutes Paid for Taxes

Federal, state and local taxes are a large item in Sprague Electric's budget just the same as they are in running your own home.

In 1967 the Company paid \$5,224,-012 – or 20 minutes in each working day.

THE TIME IS NOW 3:20 P.M.



20 Minutes

Depreciation and Amortization

The physical aspects of a company, the buildings and the manufacturing equipment, decline in value each year. In the operating expenses, a certain amount of money is set aside each year to provide for replacement of machinery and maintenance of buildings.

In 1967 we allowed \$5,130,465.

THE TIME IS NOW 3:48 P.M.



8 Minutes

For Interest on Borrowed Money

Sprague Electric like most companies, borrows money for various needs including expansion of facilities.

The \$2,024,261 interest on this money in 1967 required 8 minutes in our working day.

THE TIME IS NOW 3:28 P.M.



12 Minutes for Profit

Profit for the Company is divided into two major segments. First is the \$2,019,570 paid in dividends to our over 9,000 stockholders. Second is the \$1,305,903 which is re-invested in the business. The two items combined provide the Company profit which amounted to \$3,325,473.

Only 12 minutes in our working day provides the profit for this large, diversified company. The final minutes of the day are devoted to profit.

IT IS NOW 4:00 P.M. Our day's work is done.

The Year In Review

The Components Market in 1967

The year 1967 was a depressed year in the components business, with industry sales declining from the preceding year's for the first time since 1958. Although electronic equipment sales gained about 10% over 1966, severe inventory imbalances, of both end products and components, led to extremely conservative components purchasing decisions on the part of many users. Thus, the sales of components producers not only reflected production cutbacks on the part of equipment manufacturers in the face of disappointing demand for their own products, but they were also depressed by the trimming of excess components inventories in the hands of these customers as the year began.

An example of this effect can be seen in the figures for capacitors, of which we are the leading producer and which account for more than half our total volume. Demand for capacitors had been strong throughout 1966 in all markets, partly because of a high level of actual sales of electronic end equipment, but partly also because components inventories were being built up in the face of what appeared to be a threatened shortage of components in the second half of the year.

Estimated shipments of capacitors by market for 1966 and 1967 were as follows, in comparison with the normal pattern:

	Actual Shipments		Estimated Normal Demand	
	1966	1967*	1966	1967
	(\$ Million)			
Consumer electronics	\$135	\$105	\$120	\$109
Industrial electronics	154	127	132	158
Government electronics	103	104	103	104
Nonelectronic applications	69	70	69	70
Replacement market	31	30	31	32
	-			
Total shipments *Estimated	\$492	\$436	\$455	\$473

The outlook for 1968 is considerably better in the components markets, as there is now strong evidence of a more normal supply-demand balance in both the consumer and industrial sectors.

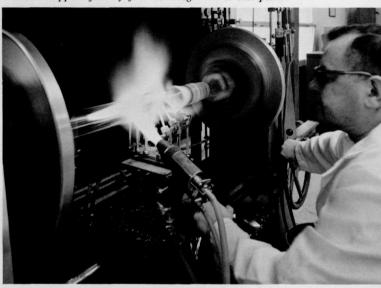
Microelectronics

The challenging field of microelectronics again stood out as the most rapidly growing segment of the electronics in-



This large machine and model-making shop in North Adams sustains the operations of our integrated circuit plant.

The glass tube being shaped here on a quartz lathe will be used in a diffusion furnace. The quartz and Pyrex glass shop is an essential support facility for the integrated circuit plant.



Shown here on a light table are "flatpacks" for integrated circuits which are manufactured at our Concord plant. Each integrated circuit flat-pack is inspected carefully under a microscope before it is shipped to Worcester. At this facility the integrated circuit is mounted in the flat-pack and sealed. The package is then cut from the frame and the completed circuit is ready for final testing.





Silicon wafers, shown inverted in the top of the fixture, are being loaded into vacuum evaporation equipment, in which aluminum will be deposited on the wafers to form the interconnection pattern between the various circuit elements on each chip.

An operator here observes the growth of a silicon crystal through an optical filter. To grow these silicon crystals, the first step in materials preparation for integrated circuits at the Concord, New Hampshire plant, a seed crystal of proper crystalline structure is inserted into molten silicon, then slowly removed as more silicon adheres to the seed.

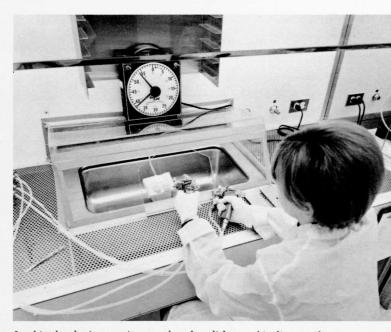


dustry last year. Continued improvements in the technology of integrated circuits resulted in ever-widening application of these remarkable devices in an increasingly broad range of military-space and industrial applications, and lower costs made their use more fully competitive with conventional components in more and more circuit functions.

The following table shows the dramatic increase in dollar volume of integral circuit packages of all types in 1967:

	1966	1967	%Increase	
	(\$ Million)		(Decrease)	
Integrated Circuits				
Monolithic digital	\$117	\$182	55%	
Monolithic linear	31	46	48	
Hybrid linear	17	30	76	
Total	\$165	\$258	56%	
Functional Assemblies				
Ceramic passive networks	\$ 35	\$ 38	8%	
Filters and pulse networks	65	62	(4)	
Other component assemblies	105	95	(9)	
		-		
Total	\$205	\$195	(5)%	
Total Integral Circuit Packages	\$370	\$453	22%	

In terms of sheer numbers, digital circuits, such as those used in computers and many military and space guidance systems, continued to account for about 90% of total shipments. As shown in the table, the use of integrated microelectronic circuits accelerated rapidly in 1967.



In this developing station on the photolithographic line at the Worcester plant, the operator sprays developer and fixer solutions on up to 12 wafers at a time, to develop the circuit pattern printed on a photosensitive emulsion coating.

An expert glass blower at the Worcester plant fabricates Pyrex glass parts for a diffusion bubble system.



Semiconductor Operations and Prospects

Just as 1966 was a year devoted largely to the construction of the Worcester plant, opened late in that year, so 1967 has also been a year of building for us, not of facilities but of product acceptance, increased production capability and more intensive marketing coverage. Substantial time during the past year has been devoted to sampling customers, conducting product testing and qualification programs and developing customer outlets and sales applications for our microelectronic products. We have also built up a sizeable backlog of production orders, deliveries on which have recently begun to be substantial.

Other Components

Although our sales of both active and passive components in 1967 were below those of the previous year, in line with the general trend in the industry we wish to make it clear that by no means does this imply a continuing downtrend in this part of our business in future years. On the contrary, we look for continued growth in sales of our older product lines at a râte of approximately 6 - 8% per year between now and the mid-1970's.

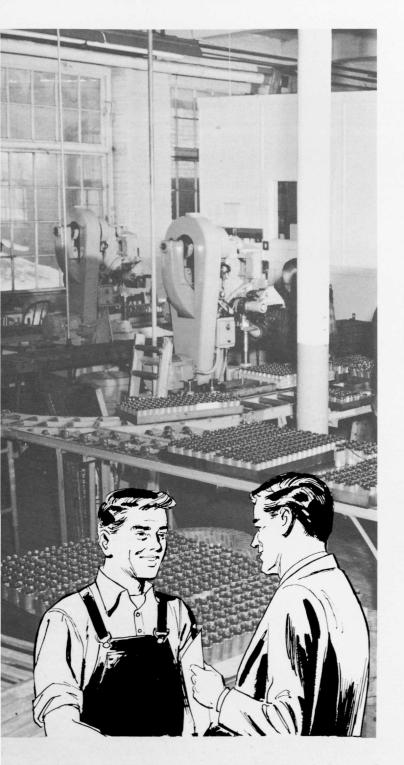
This forecast takes into account the anticipated rapid increases in the use of integrated circuits and other microelectronic components. It is important, however, to remember that old and new technologies in electronic circuitry always overlap in time. In fact, these overlapping periods are so long that rarely if ever is an earlier technology completely replaced by a later one. For example, at the present time we see very widespread use of transistorized circuits in some markets, such as military electronics, while at the same time there is continuing heavy use of vacuum tubes, which have been around for fifty years, in other applications including much of the industrial electronics market.

Integrated circuits are now coming into use along-side both vacuum tubes and transistors. Although they are by far the most rapidly growing segment of the market today, they still represent less than 20% of all electronic circuits made, and it will probably be many years before they penetrate as much as three-fourths of the circuits market. In the meantime, demand for discrete components and non-microelectronic functional assemblies will continue to grow, although the patterns will vary depending upon conditions affecting a particular product or market.

This small digital computer, at the left in the picture, controls three Sprague-built DC Integrated Circuit testers simultaneously. A complete digital circuit can be tested for as many as 50 parameters in one-fourth second.

THE FOREMAN-

A Most Important Part of the Management Team



A foreman's prime responsibility is the people of his department. This concern for his people is a two-way street – they are able to come to him for instruction and direction, and he conveys to them the department's objectives, schedules and goals.

Certainly the foreman is deeply involved in meeting delivery dates, making sure that adequate quantities of materials are on hand to process orders, and generally overseeing to the well being of the department. Each of these duties involves people – the various employes of the entire area.

All of these requirements demand understanding and cooperation from all concerned. This brings forth the foreman's skill in dealing with people. It is a normal human trait to be interested in things we understand. Repeating a routine operation, whether it be in a manufacturing area or an office report, can be monotonous unless we understand the end product or the final result to be achieved.

The alert foreman is always aware of the feelings and attitudes of the people under his jurisdiction and is always available to them for help and consultation. It is this ability to know and understand his employes which is the foreman's greatest asset. A good foreman inspires and motivates his people to do the best job possible – and they do their best because they understand the reason for their efforts.

Probably more thought and study is being given to the human element in all endeavors at the present time than at any previous point in our history. "Motivation" is a word we hear frequently. Not only industrial leaders, but also teachers and educators are realizing the needs of people to want to perform well.

At Sprague Electric we are proud of our foremen and of the concern they feel for their people.

LONG SERVICE EMPLOYES

Almost 50% of Employes have 5 years of service or more

Each year we hold ceremonies honoring employes who have reached long service anniversaries with Sprague Electric. In 1967, the largest group of Quarter Century Club members ever admitted in one year was welcomed into that elite group. A total of 117 new members raised total membership to 471.

In the Quarter Century Club we have 52 members with 35 years seniority or better; 122 with between 30 and 34 years; and 297 with between 25 and 29 years of service. These facts are even more impressive when we realize Sprague Electric is a young company – just 42 years old. Current employment totals for all U. S. operations are just slightly over 11,000. In other words, about one out of every 25 U. S. employes is a member of the Quarter Century Club.

Studying our service award statistics a bit further we find that we have 417 people who have between 20 and 24 years of service and 1346 with between 15 and 19 years with the Company. In the 10 to 14 year category we have 953 people and a total of 2151 with between five and nine years of service.

When we total our service award recipients we have 5338 people who have five years or more of service. In round figures almost 50% of all Sprague Electric employes have five years of service or better.

An unusual note as we compile our figures is the fact that we have less people in the 10-14 year group than we do in the 15-19 bracket. Our 953 employes in the 10-14 year service group are considerably less than the 1346 people with between 15 and 19 years of service. This is one of the unusual aspects one often discovers when compiling figures such as these.

It is good to know that so many of our people have been with us for such long periods of time. We are proud to have them. It is one indication that Sprague Electric Company is a good place to work.

New Quarter Century Club members and their guests filled the banquet hall at the 1967 award dinner.



Two Sprague telephone operators joined the Quarter Century Club in 1967. Their husbands are also employes.



The Pride of Sprague Electric

Top Honors
to the
men of
Formation
and
Etch House

Long service employes are found at all Sprague Electric locations, but top honors for long service personnel must surely go to the North Adams Etch and Formation Departments. The Etch House boasts seven employes with a total service of 201 years – an average of almost 29 years per man. Not to be outdone, the Formation Department has 25 employes whose service totals 556 years – an average of 22 years per man.

Formation and Etch House are two of the relatively few departments in the Company where all employes are men, and these men have accumulated an outstanding record. We extend to them our most sincere congratulations.



Seven employes from the Etch House have a total of 201 years of service for an average of almost 29 years each. They are (left to right) Alden Jones, Sr., 25 years; John Ariazi, 32 years; Armand Chouinard, 32 years; Burton Moloff, 35 years; William Sorel, 25 years; and John Mould, 24 years. Missing when the picture was taken was Walter Tovani, 27 years.

In the Formation Department 25 employes have a total of 556 years of service. Shown in the left picture they include: (standing, left to right) George Senecal, Foreman with 37 years; Leon Beckwith, 6 years; Lawrence LaBombard, 18 years; Arcade Gibeau, 38 years; Adam Pevoski, 25 years; Stanley Gliwski, 25 years; Carlton Estes, 18 years; Wilfred Gilbert, 23 years; and James F. X. Shea, 35 years. Kneeling, same order: Bill Stackpole, 24 years; Harold Lowe, 19 years; and Ernest Konopka, 3 years. Also in the Formation group (shown below right) are: (standing, left to right) George Perras, 27 years; Giulio Brondoni, 22 years; Cornelius Cronin, 24 years; Adrian Rousseau, 20 years; Alex Brown, 29 years; Alfred Burgess, 9 years; Arthur Hewitt, 35 years; and Louis Segala, Jr., 22 years. Kneeling, left to right: Francis Robare, 20 years; James Blair, 17 years; and John Zwiercan, 24 years. Missing when the picture was taken were William Davis, 27 years; and Richard Brayman, 14 years.







As a company we have a remarkable safety record. The statistics by which our insurance carriers compute the premiums to be paid show that man hours worked versus lost time accidents is a very low ratio – actually thousands of hours are worked for each lost time accident.

We are proud of this record, but as long as one single person is injured at any time on the job we will not be satisfied. We will keep checking potential hazards, installing the latest and best in safety equipment and above all will keep educating our people to be aware of any possible threat to their safety on the job.

Human beings are naturally careless at times – especially when performing a familiar task. Our minds are apt to wander on occasion to thoughts far removed from the actual work being performed. This may be a prime moment for an accident to occur.

It has been said that every "near" accident should be considered as an actual accident when planning our safety program. For one time – or possibly more than once – the accident was averted. The potential, however, was real and only quick action or a bit of luck prevented the actual accident from occurring. Safety measures should become almost automatic in our every day life. We are fortunate, most of us, when a *near miss* happens to us. There is no injury or lost time and the incident usually becomes an embarrassing moment in the retelling. However, we must realize that accidents *can* happen to anyone and should a *near miss* happen, we should recognize it for what it is . . . a subtle sign of danger.

At Sprague Electric, we constantly strive to motivate every coworker to apply accident prevention as an integral part of every job. We are pleased that our people are aware of our safety procedures and as a result we can be justly proud of our outstanding safety record.

Five Plants Receive Awards

In 1967 our plant in Hillsville, Virginia was the recipient of a Safety Award for having worked in excess of 1,300,000 man hours over a 13 month period without a lost time accident and the Ashe County Plant in Lansing, North Carolina received a Safety Award Certificate for 2,100,000 accident-free man-hours.

Sprague of Wisconsin was also the recipient of a Special Safety Award from the American Mutual Insurance Company in recognition of 3,500,000 hours without a lost time accident.

Two North Adams plants received safety awards last year from the National Safety Council. The second highest industrial award in the nation, the *Award of Merit*, was presented to the Beaver Street Plant for operating a total of 1,573,738 hours over an 18-month period without a disabling injury which resulted in lost time. The highest award in the nation, the *Award of Honor*, was granted to the Special Components Division, Union Street Plant, for completing 4,265,583 accident-free man hours over a six and a half year period.

In March of this year the Special Components Division was again honored for its outstanding safety record. A

plaque as runner-up to the Grand Trophy Award, the highest industrial award in the state, was presented to the Division at the Industrial Safety Luncheon of the 47th Annual Massachusetts Safety Conference held at the Statler-Hilton Hotel in Boston. The award was accepted by Anthony N. Sacco, Corporate Safety Supervisor, on behalf of the Company. The Special Components Division has worked without a lost time accident since December 8, 1960 and compiled a total of 4,906,131 accident-free hours as of December 31, 1967 - a record which is still continuing. The statewide Industrial Accident Reduction Award Program is sponsored by the Associated Industries of Massachusetts. To be considered for an award, a company must have an accident frequency rate that does not exceed the national average for that particular industry.

A formal local presentation of this award will be held at the Union Street Plant on April 9 at 2 p.m. with A. Lionel Lawrence, President of the Safety Council of Western Massachusetts, and Victor Mari, Executive Director, making the presentation. Norton Cushman, SCD Manager; Harold F. White, SCD Factory Manager; and Anthony N. Sacco will accept the award on behalf

of the Union Street employes. Representatives of the various production departments will also be on hand to witness the ceremony.

The Special Components Division also earned a statewide Group Winner Award which will be presented at the Safety Council of Western Massachusetts' Annual Awards Banquet scheduled for next April.

"We are honored to have earned these awards," stated Mr. Cushman. "We are proud of our employes for their outstanding achievement in accident prevention and look forward to continuing this fine safety record. Our goal now is to earn the Grand Trophy Award in 1968."

A. Lionel Lawrence, President of the Safety Council, said, "This accomplishment is considered to be one of the best safety records ever achieved by a company in Western Massachusetts. We are proud that a member of our Safety Council has earned this honor and consider it a tribute to labor and management in their combined efforts to eliminate accidents. No individual or group of people can strive to reach a higher goal than that of preventing the loss of life or injury to a fellow man," he concluded.

Runner-up to the Grand Trophy Award

Anthony N. Sacco, Corporate Safety Supervisor, accepted the Safety Award on behalf of the Special Components Division from David W. Skinner, Vice President of the Associated Industries of Massachusetts (right) as A. Lionel Lawrence, President of the Safety Council of Western Massachusetts waited to offer his congratulations. The presentation of the Grand Trophy Runner Up Safety Award was made at the Industrial Safety Luncheon of the 47th Annual Massachusetts Conference held at the Statler-Hilton Hotel in Boston. The award was granted to SCD in recognition of 4,906,131 hours – from December 8, 1960 to December 31, 1967 – without an accident that resulted in lost time. The statewide Industrial Reduction Award Program is sponsored by the AIM and the Safety Council of Western Massachusetts. To be considered for an award a company must have an accident frequency rate that does not exceed the national average for that particular industry.



"THE COMPANY"

We hear the term often but just exactly what do people mean...



The Mark of Reliability is Sprague Electric Company's registered trademark. The sign itself denotes the Company whenever it appears, but it is not the Company. And yet Sprague Electric does have individual characteristics and an image which has been developed ever since the Company was first organized.

Since there definitely is a Company personality which is a composite of many things it is well that we review a few pertinent facts as to just who or what is "the Company".

Is It Buildings and Machinery?

These numerous buildings and all the machinery and office equipment located in them are certainly most important and must be provided or there would be no place for the thousands of employes to perform their jobs. But buildings and machinery by themselves would be nothing. Attractive well kept buildings and good tools denote a successful organization, but they do not inspire the company image.

Is It Your Group Leader?

We'll admit that he is an important person. He has to see that each work station is provided with the necessary supplies, that work moves through the department on schedule, and that quality standards are maintained at all times. He is an important member of the manufacturing team, but he is not "the Company".





Is It A Plant or General Manager

Every manufacturing plant must have a person in charge of operations. This is also true for other areas such as engineering, accounting, purchasing, quality control, research and all other parts of Sprague Electric. The manager has a great deal of responsibility to make sure that all facets of his operation run smoothly and achieve their objectives.

He must also provide proper coordination between his operation and other areas. But with all his duties and responsibilities he is only one part of "the Company".

Is It Top Management?

The chairman of the board and the president have a great deal of responsibility and authority. They are involved in making basic decisions affecting the entire Company. Matters such as investment in equipment and facilities, long range product development and marketing plans, employe compensation and benefits, and many more which are vitally important to the Company's growth and success are all in their direct area of responsibility. These officials, however, report to the Board of Directors and cannot be said of themselves to be "the Company".

Is It The Board of Directors?

The job of the directors is setting general overall policies which are carried out by others. But they aren't "the Company" any more than a school board is the whole educational system. The directors are elected to their jobs by the stockholders.

Is It The Stockholders?

The stockholders invest their money in the company in the hopes of earning a profit. The money is used for



buildings and equipment and many of the things that are necessary for us to use in our jobs, and that does make them very important people. The stockholders elect the directors to take care of their investment much as we elect a Congressman to run the government. But they are only a part of "the Company".

Is It You?

Certainly you are mighty important. You're the one who operates the equipment and maintains it, makes the products, sells these products, types the letters, and tends to all the general details of the business. But you'd find it very difficult to do any of these things without the investment in facilities and equipment furnished by the stockholders, or without your foreman, the factory managers, the Company officers and directors.

Who, Then, Is The Company?

It's you, and all the others. It's the combined, cooperative efforts of all directed toward a goal of successful operations. It's the reputation your efforts and all the efforts of your coworkers have achieved for quality products and business integrity. That one word "reputation" perhaps comes closer than anything else to describing "the Company" because it represents the end result of all the effort that goes into our operations and is the foundation upon which any future success will be built.

So, whenever you hear a fellow employe speak about "the Company" he's actually talking about himself, about you, and all the rest of us. "The Company" is all of us working together, building a reputation with the people who buy our products and with our community neighbors for advanced ideas in research, engineering, manufacturing and marketing.



AN AWARD

for early contributions to U.S. Space Program





Sprague Electric Company received a Silver Medallion from the Space Pioneers Committee of the Association of the United States Army for its contributions to the early phase of the United States Space Program and particularly for its work in supplying reliable electronic components for Explorer I, the first U.S. space satellite. The medallion was accepted by Robert C. Sprague, Chairman of the Board and Chief Executive Officer, in behalf of the Company at a reception held January 31 in Washington, D. C. commemorating the tenth anniversary of the launching of Explorer I.

The presentation was made by the Honorary Chairman of the Committee, Senator John Sparkman of Alabama. Sprague Electric was one of 23 United States industrial firms which was singled out for its special contributions to the Explorer I program.

The reception which was held in the Presidential Ballroom Suite of the Statler Hilton Hotel in Washington also honored the five principal members of the Explorer team. These nationally known figures were Major General John B. Medaris, U. S. Army (Ret.); Thomas F. Morrow, Dr. William H. Pickering, Dr. James A. Van Allen and Dr. Werhner von Braun.

Dr. von Braun and his teammates were also presented an Explorer I Anniversary Award for 10 years of successful progress in U. S. rocketry.

Sprague Electric had been honored at the first anniversary of the first successful launching of a man-made satellite with a plaque which said in part, "in recognition of notable contribution to the program which culminated in the launching and orbiting on 31 January 1958 of the United States Army's Explorer I – America's first response to the challenge of outer space – this Award is presented to the Sprague Electric Company." Sprague's contribution to this program consisted of supplying solid tantalum and miniature metal clad paper capacitors, the latter being the pacesetter of the Company's high reliability line, and key noise suppression filters.

In addition to the Company award, medallions were also awarded to Mr. Sprague, Ernest L. Ward, President; Carroll G. Killen, Vice President, Industrial and Military Sales; Paul Netherwood, Section Head in the Engineering Department; and Frederick H. Potter, Factory Manager.

Sometimes the best things get taken for granted...

Our forty-two year history of steady growth and diversification is based on the reliability and high quality of our components. Our customers tend to take these qualities for granted in Sprague Electric products, and we're proud of it.

Within Sprague Electric, however, establishing and maintaining this superiority isn't taken for granted. It requires exceptionally qualified research scientists, development engineers, technical managers and related personnel.

To attract and hold the career-long interest of these individuals, Sprague Electric has to be an exceptional organization. It is.

Our research and engineering activities employ more than 600 people.

We have an unblemished record of employment stability, together with an engineering turnover rate that is perhaps the lowest in the industry.

We are one of the nation's largest, most diversified and fast-est-growing manufacturers of electronic components, with 21 plants in the U.S. (including a new 130,000 sq. ft. microelectronics facility in Worcester, Mass. and a new facility being constructed in Wichita Falls, Texas).

Have you been taking Sprague Electric for granted?



TRANSISTORS \cdot RESISTORS \cdot FILTERS \cdot CAPACITORS MAGNETIC COMPONENTS · INTEGRATED CIRCUITS THIN FILM CIRCUITS · DELAY LINES INTERFERENCE CONTROL COMPONENTS-CERAMICS TRANSISTORS · RESISTORS · FILTERS · CAPACITORS MAGNETIC COMPONENTS · INTEGRATED CIR THIN FILM CIRCUITS · DELAY LINES · NETWORKS INTERFERENCE CONTROL COMPONENTS-CERAMICS TRANSISTORS · RESISTORS · FILTERS · CAPACITORS MAGNETIC COMPONENTS · INTEGRATED CIRCUITS THIN FILM CIRCUITS · DELAY LINES · NETWORKS INTERFERENCE CONTROL COMPONENTS CERA TRANSISTORS · RESISTORS · FILTERS · CAPACITORS MAGNETIC COMPONENTS · INTEGRATED CIRCUITS M CIRCUITS · DELAY LINES INTERFERENCE CONTROL COMPONENTS-CERAMICS TRANSISTORS · RESISTORS · FILTERS · CAPACITORS MAGNETIC COMPONENTS · INTEGRATED CIR THIN FILM CIRCUITS · DELAY LINES · NETWORKS INTERFERENCE CONTROL COMPONENTS-CERAMICS TRANSISTORS · RESISTORS · FILTERS · CAPACI MAGNETIC COMPONENTS · INTEGRATED CIRCUITS THIN FILM CIRCUITS · DELAY LINES · NETWORKS RENCE CONTROL COMPONENTS-CERA TRANSISTORS · RESISTORS · FILTERS · CAPACITORS MAGNETIC COMPONENTS · INTEGRATED CIRCUITS CUITS · DELAY L INTERFERENCE CONTROL COMPONENTS-CERAMICS TRANSISTORS · RESISTORS · FILTERS · CAPACITORS